Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method for providing load information within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the method comprising:

receiving a plurality of packets into a selected ingress router, each packet belonging to a selected one of a plurality of service classes and the packets being transmitted to a particular destination;

metering a load value for each service class, the load value indicating a number count of streams for each service class; and

periodically transmitting one or more tickets to the destination to indicate the load value for each of the one or more service classes, wherein the one or more tickets are configured to allow dynamic resource allocation between service classes on a per stream basis.

2. (original): A method as recited in claim 1, wherein the destination is a selected one of the egress routers.

3. (original): A method as recited in claim 1 wherein the one or more tickets indicate a total number of streams for each class that is being transmitted to the destination.

4. (original): A method as recited in claim 3, wherein each ticket indicates a total number of streams for a particular class that are being transmitted to the destination.

5. (original): A method as recited in claim 3 wherein each ticket indicates a single stream for a particular class that is being transmitted to the destination.

6. (original): A method as recited in claim 3, wherein the tickets and the streams represented by the tickets are being transmitted to the same destination.

7. (original): A method as recited in claim 1, wherein one or more tickets are only transmitted for a particular class when the load value has changed for such service class.

8. (original): A method as recited in claim 1 wherein one or more tickets are transmitted after a predetermined amount of time.

9. (original): A method as recited in claim 1 wherein the one or more tickets are sent to a selected core router and configured to allow the selected core router to dynamically allocate resources based on the current load of each class.

10. (original): A method as recited in claim 9 wherein the tickets facilitate assured forward routing and differentiated services performed by the core router.

11. (currently amended): A router for providing load information within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the router comprising:

a memory; and

a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted to provide:

receiving a plurality of packets, each packet belonging to a selected one of a plurality of service classes and the packets being transmitted to a particular destination;

metering a load value for each service class, the load value indicating a number count of streams for each service class; and

periodically transmitting one or more tickets to the destination to indicate the load value for each of the one or more service classes, wherein the one or more tickets are configured to allow dynamic resource allocation between service classes on a per stream basis.

12. (original): A router as recited in claim 11, wherein the destination is a selected one of the egress routers.

13. (original): A router as recited in claim 11 wherein the one or more tickets indicate a total number of streams for each class that is being transmitted to the destination.

14. (original): A router as recited in claim 13, wherein each ticket indicates a total number of streams for a particular class that are being transmitted to the destination.

15. (original): A router as recited in claim 13 wherein each ticket indicates a single stream for a particular class that is being transmitted to the destination.

16. (original): A router as recited in claim 13, wherein the tickets and the streams represented by the tickets are being transmitted to the same destination.

17. (previously presented): A router as recited in claim 11, wherein one or more tickets are only transmitted for a particular class when the load value has changed for such service class.

18. (previously presented): A router as recited in claim 11 wherein one or more tickets are transmitted after a predetermined amount of time.

19. (previously presented): A router as recited in claim 11 wherein the one or more tickets are sent to a selected core router and configured to allow the selected core router to dynamically allocate resources based on the current load of each class.

20. (previously presented): A router as recited in claim 19 wherein the tickets facilitate assured forward routing and differentiated services performed by the core router.

21. (currently amended): A computer readable medium containing programming instructions for providing load information within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the computer readable medium comprising:

computer code for receiving a plurality of packets into a selected ingress router, each packet belonging to a selected one of a plurality of service classes and the packets being transmitted to a particular destination;

computer code for metering a load value for each service class, the load value indicating a number count of streams for each service class; and

computer code for periodically transmitting one or more tickets to the destination to indicate the load value for each of the one or more service classes, wherein the one or more tickets are configured to allow dynamic resource allocation between service classes on a per stream basis.

22. (currently amended): A method for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the method comprising:

receiving one or more tickets into a selected core router, the tickets indicating a total load for each one of a plurality of service classes, the total load indicating a total number count of streams for each one of the plurality of service classes; and

dynamically allocating resources between the ~~to a plurality of~~ streams of different ~~within each~~ service classes based on the one or more received tickets.

23. (previously presented): A method as recited in claim 22, wherein the tickets indicate the total number of streams being transmitted to the selected core router for each class.

24. (previously presented): A method for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the method comprising:

receiving one or more tickets into a selected core router, the tickets indicating a total load for each one of a plurality of service classes; and

dynamically allocating resources to a plurality of streams within each service class based on the one or more received tickets, wherein the resources are allocated by:

calculating a total controlled resource allocation per class;

calculating a resource remainder; and

allocating the resource remainder to the streams of each class based on the calculated total controlled resource allocation for each class.

25. (original): A method as recited in claim 24, wherein the total controlled resource allocation for a particular class is equal to an assigned resource allocation for each stream within the particular class times a total number of streams within the particular class and the resource remainder is equal to a total available bandwidth minus the total controlled resource allocation for all of the classes.

26. (original): A method as recited in claim 24, wherein a portion of the resource remainder is allocated to a particular class and the portion is proportionate to a ratio of the total controlled resource allocation for the particular class divided by the total controlled resource allocation for all classes.

27. (currently amended): A router for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the router comprising:

a memory; and

a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted to provide:

receiving one or more tickets into the router, the tickets indicating a total load for each one of a plurality of service classes, the total load indicating a total number count of streams for each one of the plurality of service classes; and

dynamically allocating resources between the ~~to a plurality of~~ streams of different ~~within each~~ service classes based on the one or more received tickets.

28. (currently amended): A computer readable medium containing programming instructions for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the computer readable medium comprising:

computer code for receiving one or more tickets into a selected core router, the tickets indicating a total load for each one of a plurality of service classes, the total load indicating a total number count of streams for each one of the plurality of service classes; and

computer code for dynamically allocating resources between the ~~to a plurality of~~ streams of different ~~within each~~ service classes based on the one or more received tickets.

29. (previously presented): A computer readable medium as recited in claim 21, wherein the destination is a selected one of the egress routers.

30. (previously presented): A computer readable medium as recited in claim 21, wherein the one or more tickets indicate a total number of streams for each class that is being transmitted to the destination.

31. (previously presented): A computer readable medium as recited in claim 30, wherein each ticket indicates a total number of streams for a particular class that are being transmitted to the destination.

32. (previously presented): A computer readable medium as recited in claim 30, wherein each ticket indicates a single stream for a particular class that is being transmitted to the destination.

33. (previously presented): A computer readable medium as recited in claim 30, wherein the tickets and the streams represented by the tickets are being transmitted to the same destination.

34. (previously presented): A computer readable medium as recited in claim 21, wherein one or more tickets are only transmitted for a particular class when the load value has changed for such service class.

35. (previously presented): A computer readable medium as recited in claim 21, wherein one or more tickets are transmitted after a predetermined amount of time.

36. (previously presented): A computer readable medium as recited in claim 21, wherein the one or more tickets are sent to a selected core router and configured to allow the selected core router to dynamically allocate resources based on the current load of each class.

37. (previously presented): A computer readable medium as recited in claim 36, wherein the tickets facilitate assured forward routing and differentiated services performed by the core router.

38. (previously presented): A router as recited in claim 27, wherein the tickets indicate the total number of streams being transmitted to the selected core router for each class.

39. (previously presented): A router for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the router comprising:

a memory; and

a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted to provide:

receiving one or more tickets into the router, the tickets indicating a total load for each one of a plurality of service classes, the total load corresponding to a total number of streams for each one of the plurality of service classes; and

dynamically allocating resources to a plurality of streams within each service class based on the one or more received tickets, wherein the resources are allocated by:

calculating a total controlled resource allocation per class;

calculating a resource remainder; and

allocating the resource remainder to the streams of each class based on the calculated total controlled resource allocation for the each class.

40. (previously presented): A router as recited in claim 39, wherein the total controlled resource allocation for a particular class is equal to an assigned resource allocation for each stream within the particular class times the total number of streams within the particular class and the resource remainder is equal to a total available bandwidth minus the total controlled resource allocation for all of the classes.

41. (previously presented): A router as recited in claim 39, wherein a portion of the resource remainder is allocated to a particular class and the portion is proportionate to a ratio of the total controlled resource allocation for the particular class divided by the total controlled resource allocation for all classes.

42. (previously presented): A computer readable medium as recited in claim 28, wherein the tickets indicate the total number of streams being transmitted to the selected core router for each class.

43. (previously presented): A computer readable medium containing programming instructions for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the computer readable medium comprising:

computer code for receiving one or more tickets into a selected core router, the tickets indicating a total load for each one of a plurality of service classes, the total load corresponding to a total number of streams for each one of the plurality of service classes; and

computer code for dynamically allocating resources to a plurality of streams within each service class based on the one or more received tickets, wherein the resources are allocated by:

calculating a total controlled resource allocation per class;

calculating a resource remainder; and

allocating the resource remainder to the streams of each class based on the calculated total controlled resource allocation for the each class.

44. (previously presented): A computer readable medium as recited in claim 43, wherein the total controlled resource allocation for a particular class is equal to an assigned resource allocation for each stream within the particular class times the total number of streams within the particular class and the resource remainder is equal to a total available bandwidth minus the total controlled resource allocation for all of the classes.

45. (previously presented): A computer readable medium as recited in claim 43, wherein a portion of the resource remainder is allocated to a particular class and the portion is proportionate to a ratio of the total controlled resource allocation for the particular class divided by the total controlled resource allocation for all classes.

46. (currently amended): An apparatus for providing load information within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the apparatus comprising:

means for receiving a plurality of packets into a selected ingress router, each packet belonging to a selected one of a plurality of service classes and the packets being transmitted to a particular destination;

means for metering a load value for each service class, the load value indicating a number count of streams for each service class; and

means for periodically transmitting one or more tickets to the destination to indicate the load value for each of the one or more service classes, wherein the one or more tickets are configured to allow dynamic resource allocation between service classes on a per stream basis.

47. (previously presented): An apparatus for allocating resource to one or more data streams within a network having a plurality of ingress routers, a plurality of core routers, and a plurality of egress routers, the apparatus comprising:

means for receiving one or more tickets into a selected core router, the tickets indicating a total load for each one of a plurality of service classes; and

means for dynamically allocating resources to a plurality of streams within each service class based on the one or more received tickets, wherein the resources are allocated by:

calculating a total controlled resource allocation per class;

calculating a resource remainder; and

allocating the resource remainder to the streams of each class based on the calculated total controlled resource allocation for the each class.